

Please find below and/or attached an Office communication concerning this application or proceeding.

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·		Application No.	Applicant(s)		
		09/914,718	KARUBE, ISAO		
	Office Action Summary	Examiner	Art Unit		
		Jeffrey T. Barton	1753		
Period fo	The MAILING DATE of this communication reply	n appears on the cover shee	t with the correspondence address		
THE - Exte after - If the - If NC - Failt Any	ORTENED STATUTORY PERIOD FOR R MAILING DATE OF THIS COMMUNICAT! nsions of time may be available under the provisions of 37 C SIX (6) MONTHS from the mailing date of this communicative period for reply specified above is less than thirty (30) days of period for reply is specified above, the maximum statutory is ure to reply within the set or extended period for reply will, by reply received by the Office later than three months after the ed patent term adjustment. See 37 CFR 1.704(b).	ON. FR 1.136(a). In no event, however, ma on. , a reply within the statutory minimum o period will apply and will expire SIX (6) statute, cause the application to becom	ay a reply be timely filed of thirty (30) days will be considered timely. MONTHS from the mailing date of this communicatine ABANDONED (35 U.S.C. § 133).	ion.	
Status					
1) 🖂	Responsive to communication(s) filed on	29 June 2005.			
		This action is non-final.			
3)	Since this application is in condition for al	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is			
	closed in accordance with the practice un	der <i>Ex parte Quayle</i> , 1935	C.D. 11, 453 O.G. 213.		
Disposit	ion of Claims				
4)🖾	Claim(s) 1,3-6,8 and 9 is/are pending in the	he application.			
	4a) Of the above claim(s) is/are withdrawn from consideration.				
•	5) Claim(s) is/are allowed.				
	6)⊠ Claim(s) <u>1,3-6,8 and 9</u> is/are rejected.				
	Claim(s) is/are objected to.				
اــا(ە	Claim(s) are subject to restriction a	and/or election requirement			
Applicat	ion Papers				
9)	The specification is objected to by the Exa	miner.			
10)	The drawing(s) filed on is/are: a)	· · · · · · · · · · · · · · · · · · ·	-		
	Applicant may not request that any objection t				
111	Replacement drawing sheet(s) including the c	•	* · · · ·	• •	
·	The oath or declaration is objected to by the	ne Examiner, Note the attac	med Office Action of form PTO-152.	ř	
Priority	under 35 U.S.C. § 119				
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a)	⊠ All b) ☐ Some * c) ☐ None of:				
	1. Certified copies of the priority docu				
	2. ☐ Certified copies of the priority docu3. ☒ Copies of the certified copies of the				
	application from the International B		sen received in this National Stage		
* (See the attached detailed Office action for		not received.		
Attachmen	it(s)				
1) Notic	ce of References Cited (PTO-892)		iew Summary (PTO-413)		
	ce of Draftsperson's Patent Drawing Review (PTO-94	·	No(s)/Mail Date e of Informal Patent Application (PTO-152)		
	mation Disclosure Statement(s) (PTO-1449 or PTO/S er No(s)/Mail Date	6) Other:			
S. Patent and T	rademark Office	ico Action Cum	Dott of Donas No. 11.0 1. Control		
1 OL-320 (F	1-04 <i>)</i>	ice Action Summary	Part of Paper No./Mail Date 20050	0811	
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DETAILED ACTION

Response to Amendment

1. The amendment filed on 22 June 2005 does not place the application in condition for allowance.

Status of Objections and Rejections Pending Since the Office Action of 15 November 2004

- 2. All objections and rejections of claims 2 and 7 are obviated due to cancellation of the claims.
- 3. The objection to the specification as containing numerous errors is withdrawn due to Applicant's amendment. The Examiner thanks Applicant for the care that was obviously taken in amending the specification.
- 4. The objection to claims 1-8 due to confusing language is withdrawn due to Applicant's amendment,
- 5. The rejection of claims 1, 3-5, 7, and 8 under 35 U.S.C. §102(e) as anticipated by Anderson et al is withdrawn due to Applicant's amendment.
- 6. All other previous grounds of rejection are maintained.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 8. Claims 1, 3-6, 8, and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Wiktorowicz et al.

Regarding claims 1 and 8, Wiktorowicz et al disclose a method of two-dimensional separation using a two-dimensional separation device (Figures 3-5), comprising: conducting first dimensional separation of a sample through electrophoresis in a gel (Column 12, line 66 - Column 13, line 34 discloses gel; Column 14, lines 38-46 describes the first dimension separation); and conducting a second-dimensional separation of the substances separated in the first dimension through capillary electrophoresis (Column 14, lines 46-58; Column 6, lines 6-29 describes the channels, which can also accurately be called capillaries, given their dimensions); wherein said device comprises means for the first and second dimensional separations, comprising a plurality of capillaries (170) provided on a planar support. (Figures 3-5)

Regarding claim 5, in addition to the device associated with the method described above, Wiktorowicz et al disclose a voltage source that drives the electrophoretic separations. (Column 14, line 59 - Column 15, line 7 describe electric field application - a voltage source is necessary for this)

Regarding claim 3, Wiktorowicz et al disclose the analysis of proteins by their method. (Column 11, lines 19-29)

Regarding claims 4, 6, and 9, Wiktorowicz et al disclose the first dimension of separation being isoelectric focusing. (Column 15, lines 25-40)

9. Claims 1, 3-6, 8, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Ledley.

Regarding claims 1 and 8, Ledley discloses a method of two-dimensional separation using a two-dimensional separation device (Figures 1-3), comprising: conducting first dimensional separation of a sample through electrophoresis in a gel (Column 3, lines 60-68); and conducting a second-dimensional separation of the substances separated in the first dimension through capillary electrophoresis (Column 4, lines 1-8; Column 3, lines 18-45 and Figures 1-3 describe the channels, which can also accurately be called capillaries, given their dimensions); wherein said device comprises means for the first and second dimensional separations, comprising a plurality of capillaries provided on a planar support. (Figures 1-3)

Regarding claim 5, in addition to the device associated with the method described above, Ledley discloses a voltage source that drives the electrophoretic separations. (Column 3, line 60 - Column 4, line 8 - inherent in the procedure described)

Regarding claim 3, Ledley discloses the analysis of proteins by his method. (Column 3, lines 64-66)

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Regarding claims 4, 6, and 9, Ledley discloses the first dimensional separation being isoelectric focusing. (Column 3, lines 54-59)

Response to Arguments

10. Applicant's arguments filed on 16 May 2005 have been fully considered but they are not persuasive.

In the Remarks section, at Page 8, 4th paragraph and Page 9, 1st full paragraph, Applicant states that neither Wiktorowicz et al nor Ledley specifically teaches a two-dimensional separation technique whereby one of the separation dimensions comprises a plurality of capillaries provided on a planar support. The Examiner disagrees. As described in the rejections above, both Wiktorowicz et al and Ledley disclose each and every limitation in the claims. As clearly shown in their figures, both use planar supports, with sealed grooves used to conduct the second dimension of electrophoresis. These grooves correspond to the term "capillaries", particularly in view of Applicant's disclosure on Page 11, line 13 - Page 12, line 31, which describe capillary channels of the same type used in the instantly claimed invention.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Jeffrey Barton, whose telephone number is (571) 272-1307. The examiner can normally be reached Monday-Friday from 8:30 am – 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen, can be reached at (571) 272-1342. The fax number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

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JTB

12 August 2005

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